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ABSTRACT OF THE DISCLOSURE

An enclosure forms a plurality of tiers vertically stacked in a longitudinal dimension. Each tier is a 1U modular computer system having a computer chassis configured for mounting in the multi-tiered support, and computer components that need cooling within the computer chassis. An evaporator is in thermal communication with at least one of the computer components, and vaporizes a coolant to cool that component. A condenser dissipates heat from the coolant vapor, and provides liquid coolant back to the evaporator. The condenser directs liquid coolant gravitationally downward, making the condenser and evaporator gravity driven. An air mover within the chassis cools the condenser, blows air across other components needing cooling, and removes heated air from the chassis.